What is claimed is:

1. A thin-film transistor comprising a substrate and provided thereon, an insulation layer capable of receiving a fluid electrode material, a gate electrode, a gate insulating layer, a semiconductor layer, a source electrode and a drain electrode, the source electrode and the drain electrode connecting each other through the semiconductor layer, wherein the gate electrode is formed from the fluid electrode material which has been allowed to permeate the insulation layer.

2. The thin-film transistor of claim 1, wherein the substrate is comprised of a resin.

3. The thin-film transistor of claim 1, wherein the fluid electrode material is a solution of an electrically conductive polymer or a dispersion liquid of an electrically conductive polymer.

4. The thin-film transistor of claim 1, wherein the semiconductor layer is comprised of an organic semiconductor material.

5. A process of manufacturing a thin-film transistor sheet, the process comprising the steps of:

providing a gate busline on a substrate;

providing, on the surface of the substrate on the gate busline side, an insulation layer capable of receiving a fluid electrode material;

supplying the fluid electrode material to the insulation layer, the fluid electrode material being allowed to permeate the insulation layer;

forming a gate electrode from the permeated fluid electrode material to be in contact with the gate busline;

forming a gate insulating layer on the gate electrode; and

forming a semiconductor layer on the gate insulating layer.

6. The process of claim 5, wherein the substrate is comprised of a resin.

7. The process of claim 5, wherein the fluid electrode material is a solution of an electrically conductive polymer or a dispersion of an electrically conductive polymer.

8. The process of claim 5, wherein the semiconductor layer is comprised of an organic semiconductor material.

9. The process of claim 5, between the step of the insulation layer providing step and the fluid electrode material supplying step, further comprising the step of supplying a resin solution so that the resin is allowed to

permeate portions other than portions of the insulation layer where the gate electrode is to be formed.

10. The process of claim 5, wherein the semiconductor layer is formed as a continuous layer over the entire surface on which the semiconductor layer is to be formed.

11. A thin-film transistor sheet manufactured according to the process of claim 5.